TITLE:

APPARATUS FOR CONTAMINANT REMOVAL USING

NATURAL CONVECTION FLOW AND CHANGES IN

SOLUBILITY CONCENTRATIONS BY

TEMPERATURE

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Government Rights

The U.S. Government has a paid-up license in this invention and the right in limited circumstances to require the patent owner to license others on reasonable terms as provided for by the terms of Contract No. F33615-95-D-5615 awarded by the Department of the Air Force.

Priority Information

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The present application is a continuation-in-part of co-pending divisional-application Serial No. 08/674,702, filed July 8, 1996, now U.S. Patent No. 6,165,282, which was a continuation-in-part of application Serial No. 08/348,035, filed December 1, 1994, abandoned, which was a divisional of application Serial No. 07/906,557 filed June 30, 1992, now U.S. Patent No. 5,401,322.

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BACKGROUND

Field of the Invention

The invention relates to methods and apparatus for cleaning articles using supercritical and/or near-supercritical fluids. In particular, the present invention relates to using differences in contaminant solubility and solvent density at various temperatures and/or pressures to effect cleaning action, to influence solvent and/or contaminant movement in the cleaning apparatus, and to facilitate the concentration of contaminants within the cleaning apparatus and their subsequent removal. Even more